

0570
0620

7



OIPE

RAW SEQUENCE LISTING

DATE: 07/11/2002

PATENT APPLICATION: US/10/057,321

TIME: 14:59:59

Input Set : N:\Crf3\RULE60\10057321.raw

Output Set: N:\CRF3\07112002\J057321.raw

SEQUENCE LISTING

3 (1) GENERAL INFORMATION:

5 (i) APPLICANT: BLACK, Roy A.

6 PAXTON, Raymond J.

7 BODE, Wolfram

8 NASKOS, Klaus

9 FERNANDEZ-CATALAN, Carlos

11 (ii) TITLE OF INVENTION: CRYSTALLINE TNF-alpha-CONVERTING ENZYME
12 AND USES THEREOF

14 (iii) NUMBER OF SEQUENCES: 6

16 (iv) CORRESPONDENCE ADDRESS:

17 (A) ADDRESSEE: Foley & Lardner

18 (B) STREET: Suite 500, 3000 K Street NW

19 (C) CITY: Washington

20 (D) STATE: DC

21 (E) COUNTRY: USA

22 (F) ZIP: 200078696

24 (v) COMPUTER READABLE FORM:

25 (A) MEDIUM TYPE: Floppy disk

26 (B) COMPUTER: IBM PC compatible

27 (C) OPERATING SYSTEM: PC-DOS/MS-DOS

28 (D) SOFTWARE: PatentIn Release #1.0, Version #1.30

30 (vi) CURRENT APPLICATION DATA:

C--> 31 (A) APPLICATION NUMBER: US/10/057,321

C--> 32 (B) FILING DATE: 24-Sep-2001

33 (C) CLASSIFICATION:

35 (vii) PRIOR APPLICATION DATA:

37 (A) APPLICATION NUMBER: US/09/050,083

38 (B) FILING DATE: 30-MAR-1998

40 (A) APPLICATION NUMBER: US 60/073,709

41 (B) FILING DATE: 05-FEB-1998

43 (viii) ATTORNEY/AGENT INFORMATION:

44 (A) NAME: Isacson, John P.

45 (B) REGISTRATION NUMBER: 33,715

46 (C) REFERENCE/DOCKET NUMBER: 016761/0144

48 (ix) TELECOMMUNICATION INFORMATION:

49 (A) TELEPHONE: 202-672-5300

50 (B) TELEFAX: 202-672-5399

53 (2) INFORMATION FOR SEQ ID NO: 1:

55 (i) SEQUENCE CHARACTERISTICS:

56 (A) LENGTH: 10 amino acids

57 (B) TYPE: amino acid

58 (C) STRANDEDNESS:

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/057,321

DATE: 07/11/2002

TIME: 14:59:59

Input Set : N:\Crf3\RULE60\10057321.raw

Output Set: N:\CRF3\07112002\J057321.raw

```

59      (D) TOPOLOGY: linear
61      (ii) MOLECULE TYPE: peptide
66      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
68      Pro Leu Ala Gln Ala Val Arg Ser Ser Ser
69      1          5          10
71 (2) INFORMATION FOR SEQ ID NO: 2:
73      (i) SEQUENCE CHARACTERISTICS:
74          (A) LENGTH: 8 amino acids
75          (B) TYPE: amino acid
76          (C) STRANDEDNESS:
77          (D) TOPOLOGY: linear
79      (ii) MOLECULE TYPE: peptide
84      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
86      Gly Ser His His His His His His
87      1          5
89 (2) INFORMATION FOR SEQ ID NO: 3:
91      (i) SEQUENCE CHARACTERISTICS:
92          (A) LENGTH: 11 amino acids
93          (B) TYPE: amino acid
94          (C) STRANDEDNESS:
95          (D) TOPOLOGY: linear
97      (ii) MOLECULE TYPE: peptide
102     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
W--> 104     His Glu Xaa Xaa His Xaa Xaa Gly Xaa Xaa His
105     1          5          10
107 (2) INFORMATION FOR SEQ ID NO: 4:
109     (i) SEQUENCE CHARACTERISTICS:
110         (A) LENGTH: 203 amino acids
111         (B) TYPE: amino acid
112         (C) STRANDEDNESS:
113         (D) TOPOLOGY: linear
115     (ii) MOLECULE TYPE: peptide
120     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
122     Glu Gln Asn Leu Pro Gln Arg Tyr Ile Glu Leu Val Val Val Ala Asp
123     1          5          10          15
125     Arg Arg Val Phe Met Lys Tyr Asn Ser Asp Leu Asn Ile Ile Arg Thr
126     20          25          30
128     Arg Val His Glu Ile Val Asn Ile Ile Asn Glu Phe Tyr Arg Ser Leu
129     35          40          45
131     Asn Ile Arg Val Ser Leu Thr Asp Leu Glu Ile Trp Ser Gly Gln Asp
132     50          55          60
134     Phe Ile Thr Ile Gln Ser Ser Ser Ser Asn Thr Leu Asn Ser Phe Gly
135     65          70          75          80
137     Glu Trp Arg Glu Arg Val Leu Leu Thr Arg Lys Arg His Asp Asn Ala
138     85          90          95
140     Gln Leu Leu Thr Ala Ile Asn Phe Glu Gly Lys Ile Ile Gly Lys Ala
141     100         105         110
143     Tyr Thr Ser Ser Met Cys Asn Pro Arg Ser Ser Val Gly Ile Val Lys
144     115         120         125

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/057,321

DATE: 07/11/2002

TIME: 14:59:59

Input Set : N:\Crf3\RULE60\10057321.raw

Output Set: N:\CRF3\07112002\J057321.raw

```

146   Asp His Ser Pro Ile Asn Leu Leu Val Ala Val Thr Met Ala His Glu
147       130               135               140
149   Leu Gly His Asn Leu Gly Met Glu His Asp Gly Lys Asp Cys Leu Arg
150       145               150               155               160
152   Gly Ala Ser Leu Cys Ile Met Arg Pro Gly Leu Thr Pro Gly Arg Ser
153               165               170               175
155   Tyr Glu Phe Ser Asp Asp Ser Met Gly Tyr Tyr Gln Lys Phe Leu Asn
156               180               185               190
158   Gln Tyr Lys Pro Gln Cys Ile Leu Asn Lys Pro
159               195               200
161 (2) INFORMATION FOR SEQ ID NO: 5:
163   (i) SEQUENCE CHARACTERISTICS:
164       (A) LENGTH: 287 amino acids
165       (B) TYPE: amino acid
166       (C) STRANDEDNESS:
167       (D) TOPOLOGY: linear
169   (ii) MOLECULE TYPE: peptide
174   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
176   Pro Glu Glu Leu Val His Arg Val Lys Arg Arg Ala Asp Pro Asp Pro
177       1               5               10               15
179   Met Lys Asn Thr Cys Lys Leu Leu Val Val Ala Asp His Arg Phe Tyr
180               20               25               30
182   Arg Tyr Met Gly Arg Gly Glu Glu Ser Thr Thr Thr Asn Tyr Leu Ile
183               35               40               45
185   Glu Leu Ile Asp Arg Val Asp Asp Ile Tyr Arg Asn Thr Ser Trp Asp
186               50               55               60
188   Asn Ala Gly Phe Lys Gly Tyr Gly Ile Gln Ile Glu Gln Ile Arg Ile
189               65               70               75               80
191   Leu Lys Ser Pro Gln Glu Val Lys Pro Gly Glu Lys His Tyr Asn Met
192               85               90               95
194   Ala Lys Ser Tyr Pro Asn Glu Glu Lys Asp Ala Trp Asp Val Lys Met
195               100              105              110
197   Leu Leu Glu Gln Phe Ser Phe Asp Ile Ala Glu Glu Ala Ser Lys Val
198               115              120              125
200   Cys Leu Ala His Leu Phe Thr Tyr Gln Asp Phe Asp Met Gly Thr Leu
201               130              135              140
203   Gly Leu Ala Tyr Val Gly Ser Pro Arg Ala Asn Ser His Gly Gly Val
204               145              150              155              160
206   Cys Pro Lys Ser Gly Ser Ser Gly Gly Ile Cys Glu Lys Ala Tyr Tyr
207               165              170              175
209   Ser Pro Val Gly Lys Lys Asn Ser Lys Leu Tyr Ser Asp Gly Lys Lys
210               180              185              190
212   Lys Glu Ala Asp Leu Val Thr Thr His Glu Leu Gly His Asn Phe Gly
213               195              200              205
215   Ala Glu His Asp Pro Asp Gly Leu Ala Glu Cys Ala Pro Asn Glu Asp
216               210              215              220
218   Gln Gly Gly Lys Tyr Val Met Tyr Pro Ile Ala Val Ser Gly Asp His
219               225              230              235              240
221   Glu Asn Asn Lys Met Phe Ser Asn Cys Ser Lys Gln Ser Ile Tyr Lys

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/057,321

DATE: 07/11/2002

TIME: 14:59:59

Input Set : N:\Crf3\RULE60\10057321.raw

Output Set: N:\CRF3\07112002\J057321.raw

```

222          245          250          255
224 Thr Ile Glu Ser Lys Ala Gln Glu Cys Phe Gln Glu Arg Ser Asn Lys
225          260          265          270
227 Val Cys Gly Asn Ser Arg Val Asp Glu Gly Glu Glu Cys Asp Pro
228          275          280          285
230 (2) INFORMATION FOR SEQ ID NO: 6:
232 (i) SEQUENCE CHARACTERISTICS:
233 (A) LENGTH: 276 amino acids
234 (B) TYPE: amino acid
235 (C) STRANDEDNESS:
236 (D) TOPOLOGY: linear
238 (ii) MOLECULE TYPE: peptide
243 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
245 Gln Glu Lys His Ala Ile Asn Gly Pro Glu Leu Leu Arg Lys Arg Arg
246 1 5 10 15
248 Thr Thr Ser Ala Glu Lys Asn Thr Cys Gln Leu Tyr Ile Gln Thr Asp
249 20 25 30
251 His Leu Phe Phe Lys Tyr Tyr Gly Thr Arg Glu Ala Val Ile Ala Gln
252 35 40 45
254 Ile Ser Ser His Val Lys Ala Ile Asp Thr Ile Tyr Gln Thr Thr Asp
255 50 55 60
257 Phe Ser Gly Ile Arg Asn Ile Ser Phe Met Val Lys Arg Ile Arg Ile
258 65 70 75 80
260 Asn Thr Thr Ala Asp Glu Lys Asp Pro Thr Asn Pro Phe Arg Phe Pro
261 85 90 95
263 Asn Ile Ser Val Glu Lys Phe Leu Glu Leu Asn Ser Glu Gln Asn His
264 100 105 110
266 Asp Asp Tyr Cys Leu Ala Tyr Val Phe Thr Asp Arg Asp Phe Asp Asp
267 115 120 125
269 Gly Val Leu Gly Leu Ala Trp Val Gly Ala Pro Ile Tyr Leu Asn Ser
270 130 135 140
272 Gly Leu Thr Ser Thr Ser Leu Asn Thr Gly Ile Ile Thr Val Lys Asn
273 145 150 155 160
275 Tyr Gly Lys Thr Ile Leu Thr Lys Gln Asn Tyr Gly Ser His Val Pro
276 165 170 175
278 Pro Lys Val Ser His Ile Thr Phe Ala His Glu Val Gly His Asn Phe
279 180 185 190
281 Gly Ser Pro His Asp Ser Gly Thr Glu Cys Thr Pro Gly Glu Ser Lys
282 195 200 205
284 Asn Leu Gly Gln Lys Glu Asn Gly Asn Tyr Ile Met Tyr Ala Arg Ala
285 210 215 220
287 Thr Ser Gly Asp Lys Leu Asn Asn Asn Lys Phe Ser Leu Cys Ser Ile
288 225 230 235 240
290 Arg Asn Ile Ser Gln Val Leu Glu Lys Lys Arg Asn Asn Cys Phe Val
291 245 250 255
293 Glu Ser Gly Gln Pro Ile Cys Gly Asn Gly Met Val Glu Gln Gly Glu
294 260 265 270
296 Glu Cys Asp Cys
297 275

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/057,321

DATE: 07/11/2002
TIME: 15:00:00

Input Set : N:\Crf3\RULE60\10057321.raw
Output Set: N:\CRF3\07112002\J057321.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; Xaa Pos.3,4,6,7,9,10

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/057,321

DATE: 07/11/2002

TIME: 15:00:00

Input Set : N:\Crf3\RULE60\10057321.raw

Output Set: N:\CRF3\07112002\J057321.raw

L:31 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]

L:32 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]

L:104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0